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CLAIMS

1. A spreading code assigning method in a direct sequence CDMA mobile communication system for transmitting a signal after spreading said signal doubly with a first spreading code in a first spreading code group and a second spreading code in a second spreading code group, said first spreading code having the same repetition period as an information symbol period, said second spreading code having a longer repetition period than the information symbol period, said first spreading code and said second spreading code forming spreading codes for enlarging a band of a wide-band signal, a rate of said spreading codes being higher than an information rate, said method comprising the step of:

assigning a code associated with each base station group or a code associated with each network type to which said base station group belongs as said second spreading code.

2. A signal transmitting method in a direct sequence CDMA mobile communication system for transmitting a signal after spreading said signal doubly with a first spreading code in a first spreading code group and a second spreading code in a second spreading code group, said first spreading code having the same repetition period as an information symbol period, said second spreading code having a longer repetition period than the information symbol period, said first spreading code and said second spreading code forming spreading codes for enlarging a band of a wide-band signal, a rate of said spreading codes being higher than an information rate, said method comprising the steps of:

assigning a code associated with each base station group or a code associated with each network

type to which said base station group belongs as
said second spreading code; and

transmitting a signal which is spread with
said second spreading code between a base station
5 and a mobile station.

3. A direct sequence CDMA mobile communication system for transmitting a signal after spreading said signal doubly with a first spreading code in a first spreading code group and a second 10 spreading code in a second spreading code group, said first spreading code having the same repetition period as an information symbol period, said second spreading code having a longer repetition period than the information symbol period, said first 15 spreading code and said second spreading code forming spreading codes for enlarging a band of a wide-band signal, a rate of said spreading codes being higher than an information rate, said system comprising:

20 a base station using said second spreading code assigned to each base station group or said second spreading code assigned to each network type to which said base station group belongs; and

25 a mobile station communicating with said base station by using a signal which is spread by said second spreading code assigned to said base station.

4. A transmitter in a direct sequence CDMA mobile communication system for transmitting a 30 signal after spreading said signal doubly with a first spreading code in a first spreading code group and a second spreading code in a second spreading code group, said first spreading code having the same repetition period as an information symbol period, said second spreading code having a longer repetition period than the information symbol period, said first spreading code and said second spreading 35

code forming spreading codes for enlarging a band of a wide-band signal, a rate of said spreading codes being higher than an information rate,

said transmitter assigning a code

- 5 associated with each base station group or a code
associated with each network type to which said base
station group belongs as said second spreading code,
and

said transmitter carrying out a

- 10 communication using a signal spread by said second spreading code assigned to a base station.

5. A receiver in a direct sequence CDMA

mobile communication system for transmitting a

signal after spreading said signal doubly with a

- 15 first spreading code in a first spreading code group
and a second spreading code in a second spreading
code group, said first spreading code having the
same repetition period as an information symbol
period, said second spreading code having a longer
20 repetition period than the information symbol period,
said first spreading code and said second spreading
code forming spreading codes for enlarging a band of
a wide-band signal, a rate of said spreading codes
being higher than an information rate,

25 said receiver assigning a code associated
with each base station group or a code associated
with each network type to which said base station
group belongs as said second spreading code, and

said receiver carrying out a communication

- 30 using a signal spread by said second spreading code
assigned to a base station.

6. A transceiver in a direct sequence CDMA

mobile communication system for transmitting a

signal after spreading said signal doubly with a

- 35 first spreading code in a first spreading code group
and a second spreading code in a second spreading
code group, said first spreading code having the

- same repetition period as an information symbol period, said second spreading code having a longer repetition period than the information symbol period, said first spreading code and said second spreading
- 5 code forming spreading codes for enlarging a band of a wide-band signal, a rate of said spreading codes being higher than an information rate,
- said transceiver assigning a code associated with each base station group or a code
- 10 associated with each network type to which said base station group belongs as said second spreading code, and
- said transceiver carrying out a communication using a signal spread by said second spreading code assigned to a base station.
- 15 7. The transmitter in the direct sequence CDMA mobile communication system as claimed in claim 4, said transmitter comprising:
- second spreading code control means which generates and controls said second spreading code associated with each base station group or each network type to which said base station group belongs.
- 20 8. The receiver in the direct sequence CDMA mobile communication system as claimed in claim 5, said receiver comprising:
- second spreading code control means which generates and controls said second spreading code associated with each base station group or each network type to which said base station group belongs.
- 25 9. The transceiver in the direct sequence CDMA mobile communication system as claimed in claim 6, said transceiver comprising:
- second spreading code control means which generates and controls said second spreading code associated with each base station group or each

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network type to which said base station group
belongs.

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